## Roberts, Bradley

From:

McCabe, Greg

Sent:

Wednesday, April 15, 2015 2:39 PM

To:

Roberts, Bradley

Subject:

Occidental Revised HHRA Workplan

Brad -

I've looked at the revised Occidental Chemical HHRA Work Plan, dated April 2015, and the responses to my comments on the previous version of that work plan, and most of my comments appear to have been adequately addressed. The following comments are ones I where I questioned the response to comments. However, I don't have the familiarity with the site and the work that's been previously done that you have, so I'll leave it up to you whether or not you want to raise these issues again:

Comment 1 - It doesn't appear that an ecological risk assessment of the adjacent conservation has been done, or is being planned. I would still suggest that you get our ecological risk assessors involved at some point. But that is a RCRA program call.

Comment 11 – I saw the sample results from the deeper wells, but I couldn't find any info on the depth to the water table. If there is a possibility that shallow contaminated groundwater could seep into the excavations dug by construction workers, the CSM's should account for construction worker exposure to contaminated groundwater in the excavation via the ingestion, dermal, and inhalation (of VOCs) pathways.

Comment 12 – Regardless of what they are called, areas of significantly elevated contaminant concentrations which have the characteristics of "hotspots" should be addressed separately in the risk assessment. The reason for this is to avoid the "diluting" of high contaminant concentrations with low contaminant concentrations, which may result in an underestimation of risk. I can't tell from the workplan how large the "potential release areas" are relative to the exposure areas, or how much soil sampling has been done to characterize those "release areas" to date. If they are relatively small areas, if the contaminant concentrations are not exceedingly high, and if they have been relatively well-defined, then it's probably ok to consider them as part of the larger exposure area. If those things aren't true, then an assessment of the hotspots may be appropriated. RAGS Part A provides guidance regarding the characteristics of hotspots, as well as when and how they should be evaluated in the risk assessment, if necessary. Regardless, any decisions regarding whether or not (and how) to separately evaluate any areas of significantly elevated contaminant concentrations should be supported in the risk assessment.

Comment 13 – It is not surprising that there is little visual evidence today of any spills which might have taken place decades ago. The purpose of the comment was to ask what analytical data, rather than visual evidence, has been relied on to support the conclusion that soil contamination is not present in any areas impacted by historical spills and releases of contaminants. The risk assessment should rely on analytical data for support, as opposed to simply assuming that a spill area has been cleaned up because of a lack of visible contamination in the soil.

Let me know if you have any questions, or want to discuss further.

Greg

